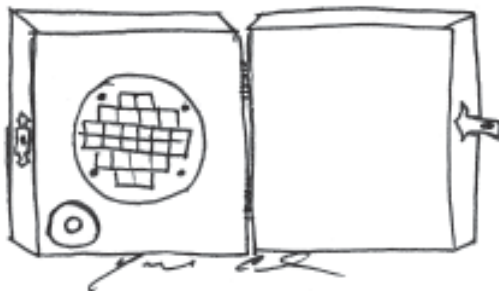


Resource Specialist

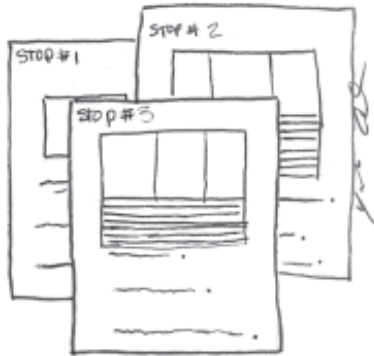
Equipment & Procedure Guide



1. **Review the “*Tips and Tricks for Resource Specialists*”** PDF document.
2. **Explore the *Riparian Rx* materials in the “Teachers” section** to become familiar with the pre-work. Then you will have an idea of what the student knows. Always praise the classroom teacher for prepared students!
3. **Field study description:** A short hike is conducted to include three pre-selected stops; 1) vegetation transect and transition zone (if not demonstrated in the transect); 2) stream geomorphology, valley, and channel types, and, 3) plant identification (if appropriate), functions, adaptations, cultural uses, and animal signs.
4. **Checklist of equipment necessary for this station:**
 - 5' piece of bright flagging for plot study radius on transect
 - One 100 ft./meter measuring tape for transect
 - Two magnifying lenses for flora/fauna station
 - Field guides for references
 - Student field worksheets (provided by the teacher; you might have extra worksheets copied on write-in-the-rain paper just in case. These are found in the “Teachers” section)
 - Yardstick
 - Spherical densiometer (local U.S. Forest Service office)
5. **Directions to students:**
Keep on waders throughout the riparian station; they can be rinsed in the stream later if needed
6. **Selecting and preparing the site:** Choose a short hike or walk with a clear travelway and as few overhanging obstructions as possible. Find a short loop that is about 10 minutes nonstop, and mark it with flags or instructional materials if necessary. Name the stations as they occur on the trail and organize worksheets to reflect what occurs in the field. Try to design the walk to minimize damage from trampling or repeated plucking; however, some hands-on collection may be desirable.



Transect Station: Along the trail route, set up a transect where the vegetation shows as much transition between types as possible. Use a 100' tape and flagging to show students how a transect is done. Choose one stop along the transect as a study plot. Set up a central stake tied with a piece of flagging 5' long to be used as a radius; when extended, it will describe a circle 10' in diameter. The transect may emphasize the diversity of plants in the zone represented, or perhaps a dynamic change between two vegetation types.



Geomorphology Station: Choose a site where you can see the stream and as much of the valley and valley walls as possible; up and/or downstream. Discuss valley types, stream channel types and how the bed material may be influencing the behavior of the stream, and possible formation (or loss) of fish or wildlife habitat. Look for evidence of a floodplain and discuss its function. If possible, have students measure depth across the channel in one or more places and plot the points to illustrate the shape of the channel bottom. Compare this to the surrounding valley for clues to stream type.



Flora and Fauna Station: Select the site carefully. Try to have some common plants or trees nearby to identify, as well as some plants with interesting adaptations and multiple functions in the ecosystem. Discuss functions and adaptations. Select a location with as much animal sign (birds, insects, too) as possible. Try to include plants that have or have had cultural uses by Native Americans.



7. Time permitting, ask about the functional differences and importance of plants. Remind students to save data for follow-up work back in the classroom. Help them with plant identification and Native American uses. Have them look across the river and identify vegetation types and differences between both sides. Brainstorm ideas for restoration/improving the site. Emphasize the importance of geomorphology as it relates to land management, riparian systems, and fish and benthic macroinvertebrate habitats.